

Title (en)

A DEVICE AND METHOD OF MANUFACTURING HIGH-ASPECT RATIO STRUCTURES

Title (de)

VORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG VON STRUKTUREN MIT HOHEM ASPEKTVERHÄLTNIS

Title (fr)

DISPOSITIF ET PROCÉDÉ PERMETTANT DE FABRIQUER DES STRUCTURES À RAPPORT DE FORME ÉLEVÉ

Publication

**EP 3108523 A1 20161228 (EN)**

Application

**EP 15708901 A 20150220**

Priority

- EP 14156208 A 20140221
- EP 14156170 A 20140221
- EP 14163546 A 20140404
- EP 14163570 A 20140404
- NL 2015050107 W 20150220

Abstract (en)

[origin: WO2015126248A1] An method for manufacturing a electronic device is provided having a current collector capable of a high specific charge collecting area and power, but is also achieved using a simple and fast technique and resulting in a robust design that may be flexed and can be manufactured in large scale processing. To this end the electronic device comprising an electronic circuit equipped with a current collector formed by a metal substrate having a face forming a high-aspect ratio structure of pillars having an interdistance larger than 600 nm. By forming the high-aspect structure in a metal substrate, new structures can be formed that are conformal to curvature of a macroform or that can be coiled or wound and have a robust design.

IPC 8 full level

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CPC (source: EP KR US)

**H01G 9/20** (2013.01 - KR); **H01L 31/054** (2014.12 - KR); **H01M 4/0442** (2013.01 - EP KR US); **H01M 4/661** (2013.01 - EP KR US); **H01M 4/70** (2013.01 - EP KR US); **H01M 6/40** (2013.01 - EP KR US); **H01M 10/0436** (2013.01 - EP KR US); **H01M 10/0525** (2013.01 - US); **H01M 10/0562** (2013.01 - EP KR US); **H01M 10/0585** (2013.01 - EP US); **H01G 9/20** (2013.01 - EP US); **H01L 31/022425** (2013.01 - EP US); **H01M 4/0423** (2013.01 - EP US); **H01M 4/0428** (2013.01 - EP US); **H01M 4/045** (2013.01 - EP US); **H01M 10/052** (2013.01 - EP US); **Y02E 10/50** (2013.01 - KR); **Y02E 10/52** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP KR US); **Y02P 70/50** (2015.11 - EP US)

Citation (search report)

See references of WO 2015126248A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2015126248 A1 20150827**; CN 106463692 A 20170222; CN 106463692 B 20190910; EP 3108523 A1 20161228; EP 3108523 B1 20180829; JP 2017508249 A 20170323; JP 6625059 B2 20191225; KR 102372990 B1 20220310; KR 20160143656 A 20161214; US 10381651 B2 20190813; US 2017062834 A1 20170302

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**NL 2015050107 W 20150220**; CN 201580009847 A 20150220; EP 15708901 A 20150220; JP 2016552972 A 20150220; KR 20167025955 A 20150220; US 201515120232 A 20150220